AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1.   (Currently amended) An image playback apparatus that plays back moving picture data composed of a series of groups of picture data, each group comprising ~~consisting of~~ a plurality of encoded ~~picture data~~ pictures, the image playback apparatus comprising:

a buffer unit ~~buffering means~~ for buffering the moving picture data;

a decoder ~~decoding means~~ for reading out and decoding the moving picture data buffered by the buffer unit ~~buffering means~~;

an output unit ~~outputting means~~ for outputting pictures decoded by the decoder ~~decoding means~~ to a subsequent stage; and

a control unit configured ~~controlling means~~ for:

controlling the buffer unit ~~buffering means~~ to buffer, concerning a group of picture data that is played back last during a playback operation, at least picture data located at the end in a playback order, and to buffer, concerning groups of picture data except for the group of picture data that is played back last during the playback operation, picture data encoded by a predetermined encoding method,

controlling the decoder ~~decoding means~~ to decode, concerning the group of picture data that is played back last during the playback operation, at least the picture data located at the end in the playback order, and to decode, concerning the groups of picture data except for the group of picture data that is played back last during the

playback operation, the picture data encoded by the predetermined encoding method, and

controlling the <u>output unit</u> ~~outputting means~~ to output, concerning the group of picture data that is played back last during the playback operation, at least the picture data located at the end in the playback order, and to output, concerning the groups of picture data except for the group of picture data that is played back last during the playback operation, pictures corresponding to the picture data encoded by the predetermined encoding method.

2.   (Currently amended) An image playback method for <u>controlling</u> an image playback apparatus having <u>a decoder, an output unit, and a buffer unit</u> ~~buffering means~~ for buffering moving picture data composed of a series of groups of picture data<u>, each group comprising</u> ~~consisting of~~ a plurality of encoded ~~picture data~~ <u>pictures</u>, ~~decoding means for reading out and decoding the moving picture data buffered by the buffering means, and~~ <u>outputting means for outputting pictures decoded by the decoding means to a subsequent stage,</u> the image playback method comprising the steps of:

controlling the <u>buffer unit</u> ~~buffering means~~ to buffer, concerning a group of picture data that is played back last during a playback operation, at least picture data located at the end in a playback order, and to buffer, concerning groups of picture data except for the group of picture data that is played back last during the playback operation, picture data encoded by a predetermined encoding method;

controlling the <u>decoder</u> ~~decoding means~~ to decode, concerning the group of picture data that is played back last during the playback operation, at least the picture

data located at the end in the playback order, and to decode, concerning the groups of

picture data except for the group of picture data that is played back last during the

playback operation, the picture data encoded by the predetermined encoding method;

and

controlling the <u>output unit</u> ~~outputting means~~ to output, concerning the group of

picture data that is played back last during the playback operation, at least the picture

data located at the end in the playback order, and to output, concerning the groups of

picture data except for the group of picture data that is played back last during the

playback operation, pictures corresponding to the picture data encoded by the

predetermined encoding method.

3.   (Currently amended) A <u>computer-readable storage medium storing a</u>

program for controlling an image playback apparatus having <u>a decoder, an output unit,</u>

<u>and a buffer unit</u> ~~buffering means~~ for buffering moving picture data composed of a

series of groups of picture data<u>, each group comprising</u> ~~consisting of~~ a plurality of

encoded ~~picture data~~ <u>pictures</u>, ~~decoding means for reading out and decoding the~~

~~moving picture data buffered by the buffering means, and outputting means for~~

~~outputting pictures decoded by the decoding means to a subsequent stage,~~ the program

<u>including instructions for</u> ~~allowing~~ a computer to execute a process comprising the steps

of:

controlling the <u>buffer unit</u> ~~buffering means~~ to buffer, concerning a group of picture

data that is played back last during a playback operation, at least picture data located at

the end in a playback order, and to buffer, concerning groups of picture data except for

the group of picture data that is played back last during the playback operation, picture

data encoded by a predetermined encoding method;

controlling the <u>decoder</u> <s>decoding means</s> to decode, concerning the group of

picture data that is played back last during the playback operation, at least the picture

data located at the end in the playback order, and to decode, concerning the groups of

picture data except for the group of picture data that is played back last during the

playback operation, the picture data encoded by the predetermined encoding method;

and

controlling the <u>output unit</u> <s>outputting means</s> to output, concerning the group of

picture data that is played back last during the playback operation, at least the picture

data located at the end in the playback order, and to output, concerning the groups of

picture data except for the group of picture data that is played back last during the

playback operation, pictures corresponding to the picture data encoded by the

predetermined encoding method.

4.   (Currently amended) An image playback apparatus that plays back

moving picture data composed of a series of groups of picture data<u>, each group</u>

<u>comprising</u> <s>consisting of</s> a plurality of <s>picture data</s> <u>pictures</u>, each of which is classified

into one of an I(Intra-coded)-picture, a P(Predictive-coded)-picture, and a

B(Bidirectionally Predictive-coded)-picture, the image playback apparatus comprising:

a <u>buffer unit</u> <s>buffering means</s> for buffering the moving picture data;

a <u>decoder</u> <s>decoding means</s> for reading out and decoding the moving picture data

buffered by the <u>buffer unit</u> <s>buffering means</s>;

an output unit ~~outputting means~~ for outputting pictures decoded by the decoder ~~decoding means~~ to a subsequent stage; and

a control unit that ~~controlling means for, when special playback,~~ when the image apparatus is instructed to operate in forward playback different from normal playback, ~~in a forward direction is instructed,~~ is configured for:

controlling the buffer unit ~~buffering means~~ to buffer, concerning a last group of picture data in a normal playback order, all of the picture data, and to buffer, concerning groups of picture data except for the last group of picture data, part of the picture data including at least picture data classified into the I-pictures[[,]];

controlling the decoder ~~decoding means~~ to decode, concerning the last group of picture data, the picture data classified into the I-pictures or the P-pictures, and to decode, concerning the groups of picture data except for the last group of picture data, at least the picture data classified into the I-pictures[[,]]; and

controlling the output unit ~~outputting means~~ to output, concerning the last group of picture data, at least a last picture of moving pictures, and to output, concerning the groups of picture data except for the last group of picture data, at least pictures corresponding to the I-pictures[[,]].

~~whereas when the special playback, different from the normal playback, in a reverse direction is instructed,~~

~~controlling the buffering means to buffer, concerning a first group of picture data in the normal playback order, all the picture data, and to buffer, concerning groups of picture data except for the first group of picture data, part of the picture data including at least the picture data classified into the I-pictures~~

~~controlling the decoding means to decode, concerning the first group of~~ ~~picture data, at least picture data corresponding to a first picture of the moving pictures,~~ ~~and to decode, concerning the groups of picture data except for the first group of picture~~ ~~data, at least the picture data classified into the I-pictures, and~~

~~controlling the outputting means to output, concerning the first group of~~ ~~picture data, at least the first picture of moving pictures, and to output, concerning the~~ ~~groups of picture data except for the first group of picture data, at least the pictures~~ ~~corresponding to the I-pictures.~~

5.   (Currently amended) The image playback apparatus according to Claim 4, wherein

the <u>control unit is configured to specify</u> ~~controlling means specifies~~ picture types to be decoded for each group of picture data, and notifies the <u>decoder</u> ~~decoding means~~ of the picture types to be decoded in advance, and wherein

the <u>decoder is configured to read out and decode</u> ~~decoding means reads out and~~ ~~decodes~~ the moving picture data buffered by the <u>buffer unit</u> ~~buffering means~~ according to the notification from the <u>control unit</u> ~~controlling means~~.

6.   (Currently amended) An image playback method for <u>controlling</u> an image playback apparatus having <u>a decoder, an output unit, and a buffer unit</u> ~~buffering means~~ for buffering moving picture data composed of a series of groups of picture data<u>, each</u> <u>group comprising</u> ~~consisting~~ of a plurality of ~~picture data~~ <u>pictures</u>, each of which is

classified into one of an I-picture, a P-picture, and a B-picture, ~~decoding means for reading out and decoding the moving picture data buffered by the buffering means, and outputting means for outputting pictures decoded by the decoding means to a subsequent stage,~~ the image playback method comprising the steps of:

when <u>the image apparatus is instructed to operate in forward playback</u> ~~special playback,~~ different from normal playback<u>:</u> ~~, in a forward direction is instructed,~~

controlling the <u>buffer unit</u> ~~buffering means~~ to buffer, concerning a last group of picture data in a normal playback order, all <u>of</u> the picture data, and to buffer, concerning groups of picture data except for the last group of picture data, part of the picture data including at least picture data classified into the I-pictures;

controlling the <u>decoder</u> ~~decoding means~~ to decode, concerning the last group of picture data, the picture data classified into the I-pictures or the P-pictures, and to decode, concerning the groups of picture data except for the last group of picture data, at least the picture data classified into the I-pictures; and

controlling the <u>output unit</u> ~~outputting means~~ to output, concerning the last group of picture data, at least a last picture of the moving pictures, and to output, concerning the groups of picture data except for the last group of picture data, at least pictures corresponding to the I-pictures[[,]]<u>.</u>

~~whereas when the special playback, different from the normal playback, in a reverse direction is instructed,~~

~~controlling the buffering means to buffer, concerning a first group of picture data in the normal playback order, all the picture data, and to buffer, concerning~~

~~groups of picture data except for the first group of picture data, part of the picture data~~

~~including at least the picture data classified into the I-pictures;~~

~~controlling the decoding means to decode, concerning the first group of~~

~~picture data, at least picture data corresponding to a first picture of the moving pictures,~~

~~and to decode, concerning the groups of picture data except for the first group of picture~~

~~data, at least the picture data classified into the I-pictures; and~~

~~controlling the outputting means to output, concerning the first group of~~

~~picture data, at least the first picture of the moving pictures, and to output, concerning~~

~~the groups of picture data except for the first groups of picture data, at least pictures~~

~~corresponding to the I-pictures.~~

7.   (Currently amended) A <u>computer-readable storage medium storing a</u>
program for controlling an image playback apparatus having <u>a decoder, an output unit,</u>
<u>and a buffer unit</u> ~~buffering means~~ for buffering moving picture data composed of a
series of groups of picture data<u>, each group comprising</u> ~~consisting of~~ a plurality of
~~picture data~~ <u>pictures</u>, each of which is classified into one of an I-picture, a P-picture, and
a B-picture, ~~decoding means for reading out and decoding the moving picture data~~
~~buffered by the buffering means, and outputting means for outputting pictures decoded~~
~~by the decoding means to a subsequent stage,~~ the program <u>including instructions for</u>
~~allowing~~ a computer to execute a process comprising the steps of:

when <u>the image apparatus is instructed to operate in forward playback</u> ~~special~~
~~playback,~~ different from normal playback<u>;</u>~~, in a forward direction is instructed,~~

controlling the <u>buffer unit</u> ~~buffering means~~ to buffer, concerning a last group of picture data in a normal playback order, all the picture data, and to buffer, concerning groups of picture data except for the last group of picture data, part of the picture data including at least picture data classified into the I-pictures;

controlling the <u>decoder</u> ~~decoding means~~ to decode, concerning the last group of picture data, the picture data classified into the I-pictures or the P-pictures, and to decode, concerning the groups of picture data except for the last group of picture data, at least the picture data classified into the I-pictures; and

controlling the <u>output unit</u> ~~outputting means~~ to output, concerning the last group of the picture data, at least a last picture of the moving pictures, and to output, concerning the groups of picture data except for the last group of picture data, at least pictures corresponding to the I-pictures[[,]]<u>.</u>

~~whereas when the special playback, different from the normal playback, in a reverse direction is instructed,~~

~~controlling the buffering means to buffer, concerning a first group of picture data in the normal playback order, all the picture data, and to buffer, concerning groups of picture data except for the first group of picture data, part of the picture data including at least the picture data classified into the I-pictures;~~

~~controlling the decoding means to decode, concerning the first group of picture data, at least picture data corresponding to a first picture of the moving pictures, and to decode, concerning the groups of picture data except for the first group of picture data, at least the picture data classified into the I-pictures; and~~

~~controlling the outputting means to output, concerning the first group of picture data, at least the first picture of the moving pictures, and to output, concerning the groups of picture data except for the first group of picture data, at least the pictures corresponding to the I-pictures.~~

8.   (New) The image playback apparatus of claim 4, wherein, when the image apparatus is instructed to operate in a reverse playback different from the normal playback, the control unit is further configured to:

control the buffer unit to buffer, concerning a first group of picture data in the normal playback order, all of the picture data, and to buffer, concerning groups of picture data except for the first group of picture data, part of the picture data including at least the picture data classified into the I-pictures;

control the decoder to decode, concerning the first group of picture data, at least picture data corresponding to a first picture of the moving pictures, and to decode, concerning the groups of picture data except for the first group of picture data, at least the picture data classified into the I-pictures; and

control the output unit to output, concerning the first group of picture data, at least the first picture of moving pictures, and to output, concerning the groups of picture data except for the first group of picture data, at least the pictures corresponding to the I pictures.

9.   (New)   The image playback method of claim 6, further comprising the steps of:

when the image apparatus is instructed to operate in a reverse playback different from the normal playback:

controlling the buffer unit to buffer, concerning a first group of picture data in the normal playback order, all of the picture data, and to buffer, concerning groups of picture data except for the first group of picture data, part of the picture data including at least the picture data classified into the I-pictures;

controlling the decoder to decode, concerning the first group of picture data, at least picture data corresponding to a first picture of the moving pictures, and to decode, concerning the groups of picture data except for the first group of picture data, at least the picture data classified into the I-pictures; and

controlling the output unit to output, concerning the first group of picture data, at least the first picture of the moving pictures, and to output, concerning the groups of picture data except for the first groups of picture data, at least pictures corresponding to the I-pictures.

10.   (New) The computer-readable storage medium of claim 7, wherein the process further comprises the steps of:

when the image apparatus is instructed to operate in a reverse playback different from the normal playback:

controlling the buffer unit to buffer, concerning a first group of picture data in the normal playback order, all of the picture data, and to buffer, concerning groups of

picture data except for the first group of picture data, part of the picture data including at least the picture data classified into the I-pictures;

controlling the decoder to decode, concerning the first group of picture data, at least picture data corresponding to a first picture of the moving pictures, and to decode, concerning the groups of picture data except for the first group of picture data, at least the picture data classified into the I-pictures; and

controlling the output unit to output, concerning the first group of picture data, at least the first picture of the moving pictures, and to output, concerning the groups of picture data except for the first groups of picture data, at least pictures corresponding to the I-pictures.

11. (New) The image playback apparatus of claim 1, wherein the playback order includes a sequence of all I(Intra-coded)-picture(s), P(Predictive-coded)-picture(s), and B(Bidirectionally Predictive-coded)-picture(s).

12. (New) The image playback apparatus of claim 1, wherein the predetermined encoding method includes encoding a single I(Intra-coded)-picture for each group.

13. (New) The image playback apparatus of claim 1, wherein an amount of time used for displaying picture data located at the end is reduced by not buffering the picture data located at the end using the predetermined encoding method.

14.   (New) The image playback method of claim 2, wherein the playback order includes a sequence of all I(Intra-coded)-picture(s), P(Predictive-coded)-picture(s), and B(Bidirectionally Predictive-coded)-picture(s).

15.   (New) The image playback method of claim 2, wherein the predetermined encoding method includes encoding a single I(Intra-coded)-picture for each group.

16.   (New) The image playback method of claim 2, wherein an amount of time used for displaying picture data located at the end is reduced by not buffering the picture data located at the end using the predetermined encoding method.

17.   (New) The computer-readable storage medium of claim 3, wherein the playback order includes a sequence of all I(Intra-coded)-picture(s), P(Predictive-coded)-picture(s), and B(Bidirectionally Predictive-coded)-picture(s).

18.   (New) The computer-readable storage medium of claim 3, wherein the predetermined encoding method includes encoding a single I(Intra-coded)-picture for each group.

19.   (New) The computer-readable storage medium of claim 3, wherein an amount of time used for displaying picture data located at the end is reduced by not buffering the picture data located at the end using the predetermined encoding method.

20.   (New) The image playback apparatus of claim 5, wherein the control unit notifies the decoder to operate in an I-picture decoding mode concerning groups of picture data except for the last group of picture data, and to operate in an I/P-picture decoding mode concerning the last group of picture data.